

Amendments to the Claims

Please amend claims 1, 6, 11, 14, 18, 21, 25 and 28 as shown below.

Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A system for use in a communication network having a plurality of subnetworks, the system comprising:
 - a mobile computing device comprising:
 - a base module comprising a base processing unit operable on data in accordance with a set of communication software routines; and
 - a communication module comprising:
 - a first communication transceiver comprising a first operating characteristic to conduct data communications including selective data reception and selective data transmission on a first of the plurality of subnetworks;
 - a second communication transceiver comprising a second operating characteristic to conduct data communications including selective data reception and selective data transmission on a second of the plurality of subnetworks, the second operating characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and
 - a communication processor coupled between the base processing unit and the first and second communication transceivers for converting data received by the first and second communication transceivers to a format for processing by the base processing unit in accordance with the set of communicating software routines and for converting data processed by the base processing unit to a format for transmission by a selected one of the first and second communication transceivers, thereby isolating the base processing unit from differences between the first and second operating characteristics of the first and second communication transceivers.

2. (Previously presented) The system of claim 1 wherein the communication processor comprises:

a first processing unit coupled between the base processing unit and the first communication transceiver for converting data received by the first communication transceiver to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by the first communication transceiver, and

a second processing unit coupled between the base processing unit and the second communication transceiver for converting data received by the second communication transceiver to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by the second communication transceiver.

3. (Previously presented) The system of claim 1 wherein the first communication transceiver operates in a wired subnetwork and the second communication transceiver operates in a wireless subnetwork

4. (Previously presented) The system of claim 3 wherein the wireless subnetwork comprises a backup network in the event of a failure in the wired subnetwork.

5. (Previously presented) The system of claim 4 wherein the communication processor is operable to test the wired subnetwork.

6. (Currently amended) ~~The system of claim 5~~ A system for use in a communication network having a plurality of subnetworks, the system comprising;

a mobile computing device comprising:

a base module comprising a base processing unit operable on data in accordance with a set of communication software routines; and

a communication module comprising:

a first communication transceiver comprising a first operating characteristic to conduct data communications on a first of the plurality of subnetworks;

a second communication transceiver comprising a second operating characteristic to conduct data communications on a second of the plurality of subnetworks, the second operating characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and

a communication processor coupled between the base processing unit and the first and second communication transceivers for converting data received by the first and second communication transceivers to a format for processing by the base processing unit in accordance with the set of communicating software routines and for converting data processed by the base processing unit to a format for transmission by a selected one of the first and second communication transceivers, thereby isolating the base processing unit from differences between the first and second operating characteristics of the first and second communication transceivers,

wherein the communication processor is operable to initiate a test communication by the second communication transceiver and respond to the absence of receipt of a reply test communication by the first communication transceiver following initiation of a test communication by the second communication transceiver by conducting data communications with the second communication transceiver.

7. (Previously presented) The system of claim 6 wherein the communication processor is further operable to, in response to receipt of a test communication by the second communication transceiver, initiate a test communication by the first communication transceiver.

8. (Previously presented) The system of claim 1 wherein the communication module is housed in a PCMCIA card.

9. (Previously presented) The system of claim 1 wherein the communication processor is operable to relay communication received by one of its first and second

communication transceivers for retransmission by the other of its second and first communication transceivers.

10. (Previously presented) In the communication network of claim 1 including a computer and a plurality of mobile computing devices each coupled to the plurality of subnetworks and wherein at least one of the communication transceivers of each of the mobile computing devices operates in a wireless subnetwork, the communication processor of each mobile computing device being responsive to an out-of-range condition for the respective mobile computing device to initiate data communications by its said one communication transceiver to another of the plurality of mobile computing devices, the other of the mobile computing devices relaying data communications between the computer and the out-of-range data collection terminal.

11. (Currently amended) A mobile computing device comprising:
a base module comprising a base processing unit operable on data in accordance with a set of communication software routines; and

a communication module comprising;

a first communication transceiver comprising a first operating characteristic for conducting data communications including selective data reception and selective data transmission on a first subnetwork;

a second communication transceiver comprising a second operating characteristic for conducting data communications including selective data reception and selective data transmission on a second subnetwork, the second operating characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and

a communication processor coupled between the base processing unit and the first and second communication transceivers for converting data received by the first and second communication transceivers to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by a selected one of

the first and second communication transceivers, thereby isolating the base processing unit from differences between the first and second operating characteristics of the first and second communication transceivers.

12. (Previously presented) The mobile computing device of claim 11 wherein the communication processor comprises;

a first processing unit coupled between the base processing unit and the first communication transceiver for converting data received by the first communication transceiver to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by the first communication transceiver, and

a second processing unit coupled between the base processing unit and the second communication transceiver for converting data received by the second communication transceiver to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by the second communication transceiver.

13. (Previously presented) The mobile computing device of claim 11 wherein the first communication transceiver comprises a wired transceiver and the second communication transceiver comprises a wireless transceiver.

14. (Currently amended) ~~The mobile computing device of claim 13~~ A mobile computing device comprising:

a base module comprising a base processing unit operable on data in accordance with a set of communication software routines; and

a communication module comprising:

a first communication transceiver comprising a first operating characteristic for conducting data communications on a first subnetwork;

a second communication transceiver comprising a second operating characteristic for conducting data communications on a second subnetwork, the second operating

characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and
a communication processor coupled between the base processing unit and the first and second communication transceivers for converting data received by the first and second communication transceivers to a format for processing by the base processing unit in accordance with the set of communication software routines and for converting data processed by the base processing unit to a format for transmission by a selected one of the first and second communication transceivers, thereby isolating the base processing unit from differences between the first and second operating characteristics of the first and second communication transceivers,

wherein the communication processor is operable to initiate a test communication by the second communication transceiver and respond to the absence of receipt of a reply test communication by the first communication transceiver following initiation of a test communication by the second communication transceiver by conducting data communications with the second communication transceiver.

15. (Previously presented) The mobile computing device of claim 14 wherein the communication processor is further operable to, in response to receipt of a test communication by the second communication transceiver, initiate a test communication by the first communication transceiver.

16. (Previously presented) The mobile computing device of claim 11 wherein the communication module is housed in a PCMCIA card.

17. (Previously presented) The mobile computing device of claim 11 wherein the communication processor is operable to relay communication received by one of its first and second communication transceivers for retransmission by the other of its second and first communication transceivers.

18. (Currently amended) At least one communication module for use in a mobile computing device, the at least one communication module comprising:

a first communication transceiver comprising a first operating characteristic for conducting data communications including selective data reception and selective data transmission on a first subnetwork;

a second communication transceiver comprising a second operating characteristic for conducting data communications including selective data reception and selective data transmission on a second subnetwork, the second operating characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and

a communication processor coupled to the first and second communication transceivers for converting data received by the first and second communication transceivers to a predetermined format and for converting data in a predetermined format to a format for transmission by a selected one of the first and second communication transceivers.

19. (Previously presented) The at least one communication module of claim 18 wherein the communication processor comprises:

a first processing unit for converting data received by the first communication transceiver to a predetermined format and for converting data to a predetermined format for transmission by the first communication transceiver, and

a second processing unit for converting data received by the second communication transceiver to a predetermined format and for converting data to a predetermined format for transmission by the second communication transceiver.

20. (Previously presented) The at least one communication module of claim 18 wherein the first communication transceiver comprises a wired transceiver and the second communication transceiver comprises a wireless transceiver.

21. (Currently amended) ~~The at least one communication module of claim 20~~ At least one communication module for use in a mobile computing device, the at least one communication module comprising:

a first communication transceiver comprising a first operating characteristic for conducting data communications on a first subnetwork;

a second communication transceiver comprising a second operating characteristic for conducting data communications on a second subnetwork, the second operating characteristic being different from the first operating characteristic and the second subnetwork being different from the first subnetwork; and

a communication processor coupled to the first and second communication transceivers for converting data received by the first and second communication transceivers to a predetermined format and for converting data in a predetermined format to a format for transmission by a selected one of the first and second communication transceivers,

wherein the communication processor is operable to initiate a test communication by the second communication transceiver and respond to the absence of receipt of a reply test communication by the first communication transceiver following initiation of a test communication by the second communication transceiver by conducting data communications with the second communication transceiver.

22. (Previously presented) The at least one communication module of claim 21 wherein the communication processor is further operable to, in response to receipt of a test communication by the second communication transceiver, initiate a test communication by the first communication transceiver.

23. (Previously presented) The at least one communication module of claim 18 further characterized by being housed in a PCMCIA card.

24. (Previously presented) The at least one communication module of claim 18 wherein the communication processor is operable to relay communication received by one of its first and second communication transceivers for retransmission by the other of its second and first communication transceivers.

25. (Currently amended) A communication module for use in a mobile computing device, the communication module comprising:

a first communication transceiver comprising first operating characteristics used to conduct data communications including selective data reception and selective data transmission on a first subnetwork:

a second communication transceiver comprising second operating characteristics used to conduct data communications including selective data reception and selective data transmission on a second subnetwork, the second operating characteristics being different from the first operating characteristics and the second subnetwork being different from the first subnetwork; and

a communication processor coupled to the first and second communication transceivers that converts data received by the first and second communication transceivers to a predetermined format and that converts data in the predetermined format to a format for transmission by a selected one of the first and second transceivers.

26. (Previously presented) The communication module of claim 25, the communication processor comprising:

a first processing unit that converts data received by the first communication transceiver to the predetermined format and that converts data to a predetermined format in preparation for transmission by the first communication transceiver; and

a second processing unit that converts data received by the second communication transceiver to a predetermined format and that converts data to a predetermined format in preparation for transmission by the second communication transceiver.

27. (Previously presented) The communication module of claim 25, the first communication transceiver comprising a wired transceiver and the second communication transceiver comprising a wireless transceiver.

28. (Currently amended) ~~The communication module of claim 27,~~ A communication module for use in a mobile computing device, the communication module comprising:

a first communication transceiver comprising first operating characteristics used to conduct data communications on a first subnetwork:

a second communication transceiver comprising second operating characteristics used to conduct communications on a second subnetwork, the second operating characteristics being different from the first operating characteristics and the second subnetwork being different from the first subnetwork; and

a communication processor coupled to the first and second communication transceivers that converts data received by the first and second communication transceivers to a predetermined format and that converts data in the predetermined format to a format for transmission by a selected one of the first and second transceivers, the communication processor further comprising a tester that initiates a test communication by the second communication transceiver and that responds to the absence of receipt of a reply test communication by the first communication transceiver following initiation of the test communication by the second communication transceiver by conducting data communications with the second communication transceiver.

29. (Previously presented) The communication module of claim 28, the tester responding to a receipt of a test communication by the second communication transceiver by initiating a test communication by the first transceiver.

30. (Previously presented) The communication module of claim 25, the first communication processor, the second communication processor and the communication processor housed in a PCMCIA card.

31. (Previously presented) The communication module of claim 25, the communication processor further relaying communications received by one of its first and second communication transceivers fix retransmission by the other of its second and first communication transceivers.

32-49. (Canceled)